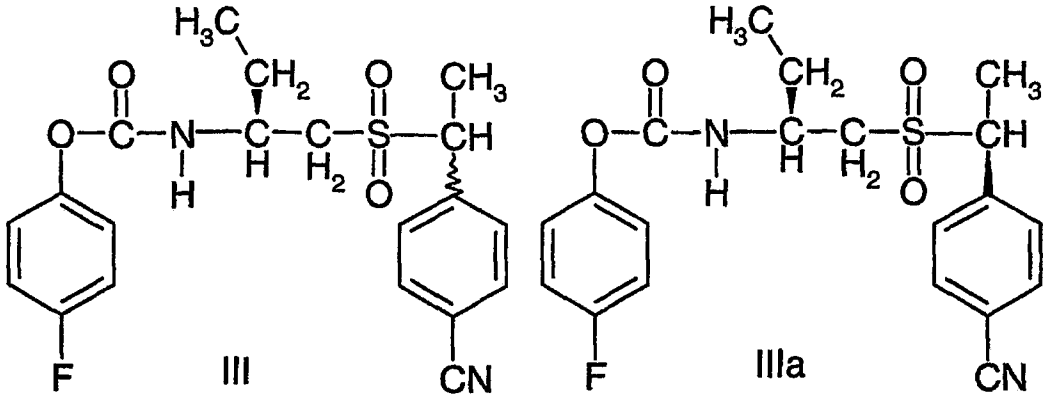
REMARKS:

Claims 1-8 are pending in the subject application.

The Examiner rejected claims 1-8 under 35 U.S.C. 103(a) over Ricks et al. (WO 02/40431) in view of Gayer et al. (CA 2351500).

The present application is directed to synergistic combinations of formula III or IIIa, below, with the certain other specified fungicides of claim 1.



The Examiner cites the Ricks et al. reference for its inclusion of formula III among many fungicidally active compounds (formula III is compound No. 42 in Table 2). While this reference states that the disclosed compounds generally could be used in combination with other pesticidal compounds (as can, in theory, any chemical), Ricks et al. in no way specify which other compounds will produce a synergistic fungicide combination with formula III. Moreover, Ricks et al. specifically state that any other pesticidal compound that is combined should be "compatible" and "not antagonistic with" with disclosed compounds (p. 10, lines 10-14). This indicates that some combinations will, in fact, not produce synergist results and could lead to lower fungicidal activity. However, there is no teaching or suggestion in Ricks et al. of how one

of ordinary skill goes about determining which, out of the multitudes of possible compounds, fit the criteria of compatible and not antagonistic.

The Examiner then cites the Gayer et al. reference, which combines a formula III compound with a particular pyrimidine derivative, which is a distinct pesticide with no relationship with what is claimed in combination with a formula III compound by the applicants. Accordingly, Gayer et al. teach only a synergistic combination involving a specific pyridine derivative that is unrelated to the pending claims. Moreover, Gayer et al. teach that their discovery is surprising and that "an unforeseeable true synergistic effect is present, and not just an addition of activities" (p. 6, lines 5-9). Again, this indicates that a synergist effect is far from predicable and that mere additive effects or even interference with activities can result from the combination of fungicides.

Thus, if one combines the teachings of Ricks et al. and Gayer et al., the teachings of synergistic compositions are all specific to combinations that must contain a pyrimidine derivative compound (i.e., "formula I" on p. 6 of Gayer et al.) as a critical component and does not teach anything specific about other combinations that possess synergy. In other words, the disclosure is both non-enabling and does not provide a reasonable expectation for success in arriving at synergistic combinations other than those that are disclosed.

Knowing that each compound in the applicants' claim 1 is a fungicide active and that each may, in general, be combinable with other actives is not evidence that it is ordinary skill to develop a synergistic composition. Stated another way, a general statement that one chemical can be

combined with generic categories of other chemicals is not the same as teaching or suggesting a particular combination that possess an unexpected synergy or other functionality.

Ricks et al. provide no meaningful teaching or guidance as to what other actives may be combined specifically with compounds III or IIIa above (which are 2 out of dozens of antifungals tested by Ricks, with perhaps thousands of different chemical structures covered by Ricks' claim 1) to achieve a synergistic composition. Instead, Ricks et al. merely state that one may add another active to the formulations they describe if they are both compatible with and not antagonistic to the activity of Ricks' compounds.

Similarly, Gayer et al. teach only the combination of pyrimidine derivatives (which are chemically different from the compounds of claim 1) with certain other compounds to achieve a synergistic fungicidal composition and further teach that the combination of fungicides to achieve synergistic activity (an not merely additive or antagonistic activity) is unforeseeable and surprising in their case. Consequently, how would one of ordinary skill be motivated to combine the applicants' formula III or IIIa with the other listed actives of claim 1, all of which are chemically different from the pyrimidine derivatives disclosed by Gayer, and expect to have a reasonable chance of success in producing synergistic activity?

A synergistic composition is one that has unexpectedly higher activity than would be expected from the addition of the activity found for each component or compound of the composition. Unexpected results are the very definition of an non-obvious combination. Of the great many fungicides known to exist (for example, some fungicides are listed at

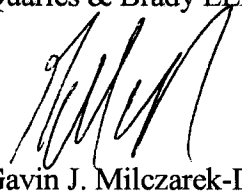
http://en.wikipedia.org/wiki/List_of_fungicides), it is very difficult if not impossible to predict which combinations will be synergistic, which ones will be merely additive, and which ones will be antagonistic or lower in activity. This is why the teachings of both cited references are limited to general statements and contain cautions regarding unproductive combinations (and, in the case of Gayer et al., that synergy was unforeseen and surprising).

In view of the above, all claims are believed to be allowable.

Except for a 2 month extension of time fee, no fee is believed to be due with this response. Should there be any unforeseen costs, please charge our Deposit Account No. 17-0055.

Respectfully submitted,

Quarles & Brady LLP



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